

ceeding. No general rule could be laid down as to the necessity of abstraction of blood; in fact, every case must be judged of by the symptoms exhibited to the practitioner. He ridiculed the notion which had lately prevailed, that Englishmen were now less able to bear the loss of blood than formerly, because, forsooth, they had degenerated in physical power. No doubt the effects of bloodletting were better understood now than formerly, but he emphatically denied that there was any degeneracy in the constitution of English people. On the contrary, better education and better food had improved the constitution of the people of this country; and if the necessity for the copious abstraction of blood should again arise, they would be found to bear it as well, if not better, than they did in former times.

Dr. DRUITT contended that Dr. Markham was wrong in asserting that any single circumstance was sufficient in itself to explain the beneficial effects of bloodletting in inflammation. Theory must succumb to practice; even if theory were advanced in support of the non-abstraction of blood, logical deductions might be drawn to show its fallacy. Thus, if it was contended that blood was in excess, bleeding undoubtedly reduced the quantity of that fluid. If the blood were of too high a specific gravity, bloodletting reduced it. If it was necessary to aerate the blood, bleeding rendered that process more easy.

Dr. WEBSTER differed with the author with respect to local bloodletting in internal inflammations. He had found that in inflammatory diseases of the chest in children the abstraction of the blood by cupping was often of the greatest service. It was nothing new to find the practice vary in regard to the employment of bleeding. It had been the case from the earliest periods; bloodletting being, at one time, almost constantly employed, whilst at another time it was almost completely abandoned. Disease assumed different types at different periods. This might explain why bleeding was less resorted to now than twenty years ago. But it must be remembered that the time might soon arrive when the necessity for bloodletting would again be indicated.

Dr. SIMSON coincided in opinion with Dr. Markham as to the importance of local bloodletting in cases of local inflammation. He thought, however, that he had taken too confined a view as to the effects of general bloodletting. Dr. Markham had considered that the pain in pneumonia was attributable to direct obstruction in the heart itself; but this opinion was contradicted by the fact, that the pain in nine cases out of ten was restricted to the seat of inflammation. In these cases the pain was the result of pleuritis, and was relieved by the local abstraction of blood. In pneumonia, bleeding was of essential service, not only from the relief it afforded to the heart itself, but by the influence it exerted in preventing the extension of the disease. But it must be remembered that there were other cases besides those mentioned in the paper, in which bloodletting afforded great relief, independent of removing any obstruction in the circulation of the heart; such, for instance, as in cerebral congestion. Whatever might be said with respect to other inflammations, venesection in cases of pneumonia was beneficial. In most other inflammations, blood could be abstracted by side currents; but in pneumonia, as every drop of blood had to pass through the inflamed lung, and there was a diminished channel for its course, it was incumbent that its quantity should be diminished.—*Lancet*, Dec. 4, 1858.

15. *Changes produced in the amount of Blood-Corpuscles by the administration of Cod-liver Oil.*—Dr. THEOPHILUS THOMPSON read (Nov. 18, 1858) a paper on this subject before the Royal Society.

The author had presented to this Society, on the 27th of April, 1854, a communication descriptive of the chemical changes produced in the blood by the administration of cod-liver oil and of cocoa-nut oil, and advanced the conclusion, deduced from chemical analysis, that any favourable result derived from the use of these oils is associated with an increase in the proportion of red corpuscles. The present communication was an extension of the inquiry, but was confined to experiments on the influence of cod-liver oil on the blood. It comprehended the principal details regarding fourteen patients affected with pulmonary consumption in various stages of progress, and the result of analyses of their blood. In two instances no oil had been given; in the remaining twelve

that medicine had been more or less freely administered, and an obvious contrast was noted in the condition of the blood, the proportion of red corpuscles to a thousand parts of blood in the two cases where no oil had been given being respectively 98.20 and 119.64, and in ten of the other patients varying from 142.32 to 174.76. In these ten cases the use of the oil had been attended with marked gain in weight and other evidences of amelioration. In another instance, in which the disease advanced, and a loss of seven pounds in weight occurred, notwithstanding four months' administration of oil, the proportion was 114.39. In one example only was a favourable effect of the oil accompanied with a low proportion of corpuscles, viz, 84.83; but in this patient, hæmoptysis, so profuse as to endanger life by increasing the poverty of the blood, had apparently modified to some extent the ordinary influence of the remedy. The analysis was conducted by Mr. Dugald Campbell in the following manner: The whole quantity of blood abstracted having been weighed, the coagulum was drained on bibulous paper for four or five hours, weighed, and divided into two portions. One portion was weighed, and then dried in a water-oven to determine the water. The other was macerated in cold water until it became colourless, then moderately dried, and digested with ether and alcohol to remove fat, and finally dried completely and weighed as fibrin. From the respective weights of the fibrin and the dry clot that of the corpuscles was calculated.

Dr. COPLAND observed that consumption is a disease which tends to produce a continual waste of blood-corpuscles, and that whatever promotes nutrition and excites the vital forces must have a beneficial tendency in such a disease; for with improved assimilation, there must evidently be a renovation of blood-corpuscles. On this principle, cod-liver oil, he believed, would be found efficacious in anæmia and rickets as well as in consumption, although he was not sure that it had any particular advantage over iron as a remedy.

Dr. GARROD thought that any future researches on this subject would be still more valuable if the analyses were rendered more specific, by ascertaining the proportions not only of the red corpuscles generally, but also of the constituent parts of the corpuscles. Without such information, it was difficult to explain the fact that cod-liver oil is so far more useful in consumption than in anæmia; and it would be desirable to determine the amount of change produced by such a remedy in the proportion of hæmatin, globulin, iron, and fat, entering into the composition of the blood-cells.—*Lancet*, Nov. 27, 1858.

16. *Narcotic Injections in Neuralgia*.—CHAS. HUNTER, Esq., House Surgeon St. George's Hospital, records (*Med. Times and Gaz.*, Oct. 16th) the following cases of neuralgia treated by narcotic injection into the part, as proposed by Dr. A. Wood, of Edinburgh.

CASE I.—J. G., aged 55, was admitted into St. George's Hospital, July 21, under Dr. Pitman, with *tie douloureux*. He had been constantly subject to it for four years, with but little intermission; at one time he obtained for a few weeks from seven to eight hours' sleep at night, but with that exception he used always to be in pain day and night, and seldom slept an hour without a violent paroxysm.

On admission he was suffering these repeated violent attacks of pain all over the left side of the face, which caused him day and night to keep up a cry of anguish. Various remedies to palliate the pain were attempted, but unsuccessfully till the 7th of August, when the local injection of morphia was commenced. About one grain and one-third of the acetate of morphia was injected at 8 P. M.; the man fell asleep very soon after, and continued to do so for seven hours. During the next few nights the same dose was regularly injected, and he slept either all night or for several hours.

On the 11th, he was asleep when visited, so no more morphia was injected; he, however, slept two hours; the next few nights the injection was not given; he slept either not at all, or most indifferently.

16th. A larger dose was injected into the cheek from within the mouth; he went off to sleep at once, and did not awake all night; he was also easy the whole of the next day; after this the original dose was continued, both night and morning.

20th. He sleeps a good deal; has good nights, and two or three hours' sleep